

SARSEN STONES FROM SOMERSET, UK

H.C. PRUDDEN



Prudden, H.C. 2010. Sarsen stones from Somerset, UK. *Geoscience in South-West England*, **12**, 250-251.

Sarsen stones are described from two localities in Somerset. One was discovered overlying peats at a locality near South Petherton in South Somerset. It is suggested that the sarsen was transported to the location where it was found, although what it was used for is unclear. A second sarsen was also collected from Combe Beacon near Combe St Nicholas, 5 km NNW of Chard, Somerset.

2 Yeovil Road, Montacute, Yeovil, Somerset, TA15 6XG, UK.
(E-mail: bugh@bughprudden.wanadoo.co.uk).

INTRODUCTION

This short note aims to describe the occurrence of two examples of sarsens, from Somerset UK. Sarsens are remnants of extensive silcretes that were previously present - they are extremely durable and were therefore prized for certain uses.

SOUTH PETHERTON

The Soil Survey of England and Wales commenced a project in 1979 to produce a soil map of the whole of England and Wales at a scale of 1:250,000. During the survey in 1984 a sarsen was discovered near South Petherton in South Somerset. The sarsen was donated to the author by S.J. Staines of the Soil Survey of England and Wales together with a log of the profile. The sarsen is 0.25 x 0.20 x 0.25 m in size (Figure 1). Much of the specimen is rough and rounded and similar to the cobble from Combe St Nicholas (see below). However, one side has a flat surface with sharp edges. There is some iron staining. The locality features the place name 'Moor' and is in a shallow valley 50 m wide with a slight gradient. The locality is set within a wide outcrop of the Bridport Sands Formation characterised by dominantly sandy sediments with alternating beds of hard, calcareous sandstone and soft, friable, micaceous



Figure 1. Sarsen cobble from Moor End, South Petherton, Somerset.

sandstone. These soils are very susceptible to severe erosion especially when under cultivation, hence the widespread occurrence of colluvium on lower slopes.

A section [ST 4290 1630] was logged to a depth of 3.50 m ending in colluvium—a fine sandy silt loam (Figure 2). Above this bed was a series of humified, wet calcareous peat beds including woody twigs, phragmites stems and flood coatings. Peat beds are quite common in South Somerset in similar valley bottoms e.g. Coker Moor [ST547 130] and West Coker Moor [ST508 133] and Witcombe [ST489 156]. Colbourne and Staines (1987) quoted Bell (1981) as stating 'Some of these peats date from the main woodland clearance in the late Neolithic or Bronze Age'. The sarsen lay on top of the peat beds. It may be significant that colluvium underlay the peat; the colluvium signifies erosion and possibly forest clearance. Recent episodes of erosion in the district have shown that colluvium eroded from valley sides is deposited as the gradient decreases leading to a reduced stream gradient and hence poor drainage and water logging. It might be that a local high water table contributed to the water logging.

The sarsen lay on top of the peat and was covered by fine sandy, stoneless, silt loam (colluvium). Deposition of colluvium recommenced following the peat episode. There are no dates available. The sarsen was clearly transported by human agencies as were many others in the neighbourhood. Was it thrown on the peat as a stepping stone? The flat surface might suggest that it could have been used for grinding or crushing.

COOMBE BEACON, COOMBE ST NICHOLAS, CHARD

Figure 3 shows a rounded cobble found on Combe Beacon near Combe St Nicholas, 5 km NNW of Chard, Somerset [ST 28471237] at 240 m O.D. It is approximately 0.28 x 0.17 m and very dense and tough. The specimen is described as a weathered siliceous rock consisting of quartz grains up to about 2 mm in size with a siliceous cement. There is a little iron oxide staining near the surface, in minute weathered-out cavities and along small cracks (Dangerfield *pers. comm.*, 2010). It appears to be a silcrete. It shows a typical cylindrical hole thought to have been occupied by a plant root. Sarsens are associated with the spreads of sands and gravels that are found on the Blackdown Plateau (East Devon Plain) mainly east of a line from near Taunton to Lyme Regis. The gravels contain an exotic suite of pebbles derived from Palaeozoic rocks, probably from the west. In particular, there are blue-grey rounded

chatter-marked flints indicative of a beach environment (Prudden, 2001, Waters, 1960). The sands and gravels are shown on the Bridport Sheet as resting on the Clay-with-flints at Beaminster Down [ST 495 035]. They can be seen in an old gravel pit next to the Hardy Monument [SY 6028 8760].

Normally, sarsens occur as large rounded 'whaleback' or tabular boulders; good examples can be seen at the cross roads at Staple Fitzpaine and behind the Greyhound Inn, [ST 264 183] and at Stonehenge. Most have been moved downslope by fluvial agencies, mass movement, or human agencies. This example is of interest for the following reasons: (a). It occurs on the Blackdown Plateau and probably near where it originated unlike the majority of sarsens which have moved downslope. (b). The field yielded many examples of exotic Palaeozoic pebbles and chatter-marked rolled flint pebbles. (c). The battered and rounded surface suggests residence in a high-energy, presumably, shoreline environment. (d). The revised

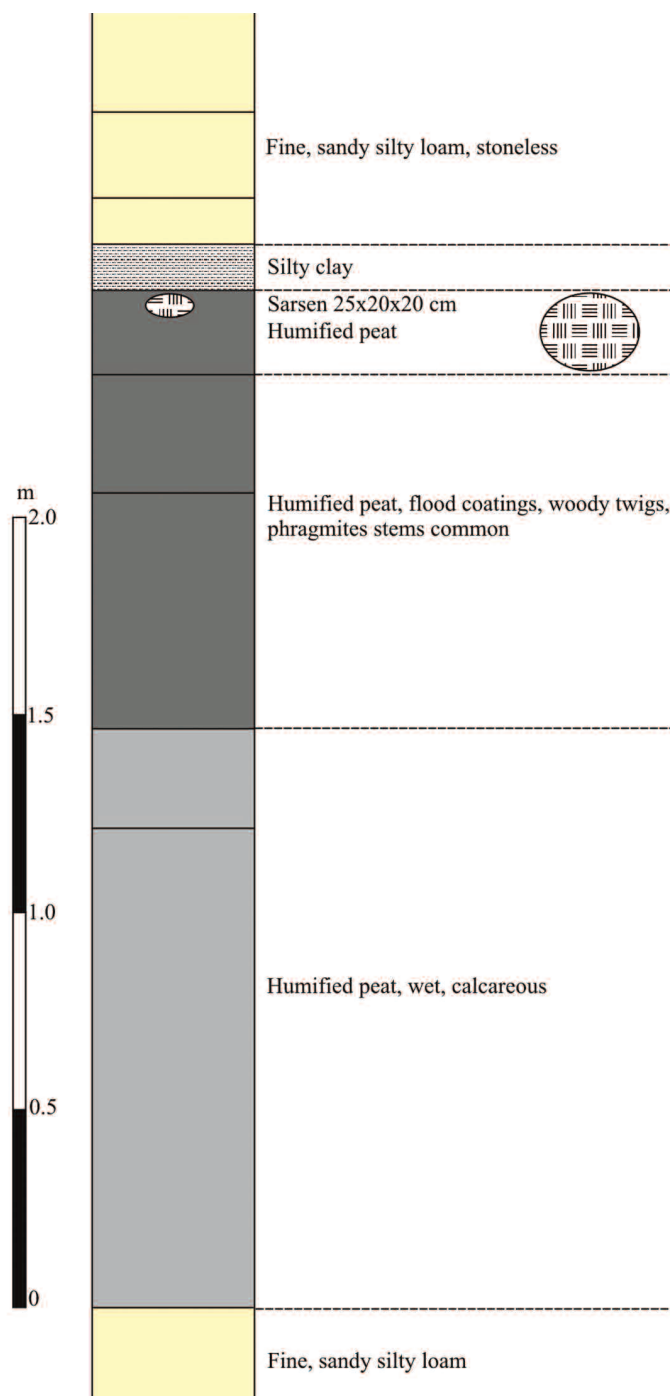


Figure 2. Section at Moor End, South Petherton [ST 4290 1630].



Figure 3. Sarsen cobble from Combe Beacon, near Combe St Nicholas, Chard, Somerset.

Wellington Sheet shows Clay-with-flints at this location. The pebbles rest on top of the Clay-with-flints. The latter fills deep pipes and pockets resulting from large-scale solution in the Chalk. The continuity of the Clay-with-flints is broken by quite extensive faulting and folding dating from the Miocene as shown on the revised Sidmouth Sheet. Therefore the dissolution of the Chalk and formation of the Clay-with-flints must be pre-Miocene (Gallois, 2009).

According to Green (pers. comm. 2010) these gravels accumulated near a shoreline of the London Clay sea. Pebbly sarsens contain quartzitic pebbles similar to those found in the gravels which suggest that some of these sediments were cemented to form sarsens. These sand and gravel beds accumulated on an early Tertiary surface, probably near the ancient sea level before the regional tectonic uplift and before the landforms were dissected as we know them today. It appears that the formation of the sarsens succeeded the Clay with Flints and that this particular sarsen was subsequently buffeted in a beach environment. There are exposures of these gravels in newly widened forestry roads and cleared ditches on the brow of the Upper Greensand escarpment at Staple Hill 8 km SE of Taunton [ST 247 159]. There is a public car park and access to footpaths by which one can explore both the gravels on the hilltop and the fine landslides that have developed on the escarpment. (Freeborough *et al.*, 2005).

REFERENCES

- BELL, M. 1981. Valley sediments and environmental change. In: JONES, M. and DIMBLEBY, G. (Eds.), *The environment of man: the Iron Age to the Anglo Saxon Period*. British Archaeology Reports. British Series, **87**, 75-91.
- COLBOURNE, G.J.N. 1981. Soil erosion in south Somerset. *Journal of Agricultural Science*, **104**, 107-112.
- COLBOURNE, G.J.N. and STAINES, S.J. 1987. *Soils in Somerset: Sheet 41/51 (Yeovil)*. Soil Survey Record No. 111.
- FREEBOUROUGH, K.A., GIBSON, A.D., HALL, M., POULTON, C., WILDMAN, A., FORSTER, A. and BURT, E. 2005. Landslide and mass movement processes and their distribution in the Wellington District of Somerset. *Geoscience in south-west England*, **11**, 139-144.
- GALLOIS, R.W. 2009. The origin of the Clay-with-flints: the missing link. *Geoscience in south-west England*, **12**, 153-161.
- PRUDDEN, H.C. 2001. *The geology and landscape of Taunton Deane*. Taunton Deane Borough Council.
- WATERS, R.S. 1960. The bearing of superficial deposits on the age and origin of the upland plain of East Devon. *Proceedings of the Ussher Society*, **28**, 89-97.